

**03040205-080**  
**(Pocotaligo River)**

### **General Description**

Watershed 03040205-080 is located in Sumter County and consists primarily of the **Pocotaligo River** and its tributaries from its origin to Turkey Creek. The watershed occupies 99,163 acres of the Upper Coastal Plain region of South Carolina. The predominant soil types consist of an association of the Wagram-Lakeland-Rains series. The erodibility of the soil (K) averages 0.13; the slope of the terrain averages 6%, with a range of 0-25%. Land use/land cover in the watershed includes: 29.5% forested land, 28.8% agricultural land, 23.6% urban land, 12.4 scrub/shrub land, 4.4% forested wetland, 1.1% water, and 0.2% nonforested wetland.

Hatchet Camp Branch (McCray Lake) and Brunson Swamp (Elliott Lake, Burnt Gin Lake) merge to form Cane Savannah Creek (Nasty Branch, Red Oak Branch, Bush Bay, Bush Branch, Bethel Creek, Cain Millpond). Green Swamp accepts drainage from Horsepen Branch, Mush Swamp (Suicide Branch, Frierson Pond, Loring Millpond, Spann Branch, Long Branch, Booths Pond, Sawmill Pond, Cypress Bay, Second Millpond), and Shot Pouch Branch (Swan Lake). Green Swamp and Cane Savannah Creek join to form the headwaters of the Pocotaligo River near the City of Sumter, which then accepts drainage from Pocalla Creek (DesChamps Pond) and Turkey Creek. The headwaters of Brunson Swamp are within the Manchester State Forest, and Shaw Air Force Base lies between Mush Swamp and Long Branch. There are numerous recreational lakes and ponds (totaling 744.4 acres) and a total of 140.8 stream miles in this watershed. The Pocotaligo River, Pocalla Creek, Green Swamp, and Turkey Creek are classified FW\* (Dissolved oxygen not less than 4.0 mg/l and pH between 5.0 and 8.0) and the remaining streams in the watershed are classified FW.

### **Water Quality**

<b><u>Station #</u></b>	<b><u>Type</u></b>	<b><u>Class</u></b>	<b><u>Description</u></b>
PD-239	S	FW	NASTY BRANCH AT S-43-251 7.5 MILES SW OF SUMTER
PD-039	S	FW*	GREEN SWAMP AT S-43-33
PD-091	P	FW*	POCOTALIGO RIVER AT US 15 3.5 MILES S SUMTER
PD-098	S	FW*	TURKEY CK AT LIBERTY ST IN SUMTER BY SANTEE PRINT WORKS
PD-040	W	FW*	TURKEY CREEK AT US 521

**Nasty Branch (PD-239)** - Aquatic life uses are not supported due to dissolved oxygen excursions, compounded by a significant decreasing trend in dissolved oxygen concentration. This is a blackwater system, characterized by naturally low pH and dissolved oxygen concentrations; however, the decreasing trend in dissolved oxygen suggests that conditions are deteriorating. Although pH excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. Recreational uses are partially supported due to fecal coliform bacteria excursions.

**Green Swamp (PD-039)** - Aquatic life uses are not supported due to dissolved oxygen excursions, compounded by a significant decreasing trend in dissolved oxygen concentration and a significant increasing trend in turbidity. This is a blackwater system, characterized by naturally low dissolved oxygen concentrations; however, the decreasing trend in dissolved oxygen suggests that conditions are deteriorating. Recreational uses are fully supported.

**Pocotaligo River (PD-091)** - Aquatic life uses are not supported due to dissolved oxygen excursions, compounded by a significant decreasing trend in dissolved oxygen concentration and a high concentration of copper measured in 1995. This is a blackwater system, characterized by naturally low dissolved oxygen concentrations; however, the decreasing trend in dissolved oxygen suggests that conditions are deteriorating. Significant decreasing trends in five-day biochemical oxygen demand and total nitrogen concentration suggest improving conditions for these parameters. PCB-1260 was detected in the 1994 sediment sample, very high concentrations of lead and zinc were measured in the 1996 sample, and a high concentration of zinc was measured in the 1998 sample. Recreational uses are fully supported and a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

**Turkey Creek** - There are two monitoring sites along Turkey Creek. Aquatic life uses are fully supported at both the upstream site **(PD-098)** and the downstream site **(PD-040)**. This is a blackwater system, characterized by naturally low dissolved oxygen concentrations. Although dissolved oxygen excursions occurred at both sites, they were typical of values seen in blackwater systems and were considered natural, not standards violations. A significant decreasing trend in turbidity at the upstream site suggests improving conditions for this parameter. A high concentration of zinc was measured in 1994 at the downstream site. Recreational uses are not supported at either site due to fecal coliform bacteria excursions; however, a significant decreasing trend in fecal coliform bacteria concentration at PD-098 suggests improving conditions for this parameter.

*A fish consumption advisory has been issued by the Department for mercury and includes the Pocotaligo River within this watershed (see advisory p.73).*

## NPDES Program

### Active NPDES Facilities

RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD) COMMENT	NPDES# TYPE LIMITATION
POCOTALIGO RIVER CWS/POCALLA VILLAGE BELK PIPE #: 001 FLOW: 0.104 WQL FOR DO,TRC,NH3N,BOD5	SC0030724 MINOR DOMESTIC WATER QUALITY

CANE SAVANNAH CREEK  
CITY OF SUMTER/TWIN LAKES SD  
PIPE #: 001 FLOW: 0.035  
WQL FOR DO,TRC,NH3N,BOD5

SC0023647  
MINOR DOMESTIC  
WATER QUALITY

CANE SAVANNAH CREEK  
GOLD KIST/POULTRY PROCESSING  
PIPE #: 002 FLOW: 0.048  
WQL FOR DO,TRC,NH3N,BOD5

SC0000795  
MAJOR INDUSTRIAL  
WATER QUALITY

MUSH SWAMP  
USAF/SHAW AIR FORCE BASE  
PIPE #: 03A FLOW: 0.72  
PIPE #: 006 FLOW: 0.0864  
PIPE #: 007 FLOW: 0.0576

SC0024970  
MINOR INDUSTRIAL  
EFFLUENT  
EFFLUENT  
EFFLUENT

MUSH SWAMP TRIBUTARY  
HARWOOD MHP/HIGH HILLS RURAL  
PIPE #: 001 FLOW: 0.0072  
WQL FOR DO,TRC,NH3N,BOD5

SC0031704  
MINOR DOMESTIC  
WATER QUALITY

MUSH SWAMP  
BURGESS GLEN MHP I  
PIPE #: 001 FLOW: 0.018  
WQL FOR DO,TRC,NH3N,BOD5

SC0031925  
MINOR DOMESTIC  
WATER QUALITY

MUSH SWAMP  
BURGESS GLEN MHP II  
PIPE #: 001 FLOW: 0.018  
WQL FOR DO,TRC,NH3N,BOD5

SC0032239  
MINOR DOMESTIC  
WATER QUALITY

MUSH SWAMP  
CAROLINA MOBILE COURT WWTP  
PIPE #: 001 FLOW: 0.030  
WQL FOR DO,TRC,NH3N,BOD5

SC0032212  
MINOR DOMESTIC  
WATER QUALITY

MUSH SWAMP  
JOE SINGLETON MINE #4  
PIPE #: 001 FLOW: M/R

SCG730171  
MINOR INDUSTRIAL  
EFFLUENT

MUSH SWAMP  
LEE CONSTRUCTION COMPANY MINE  
PIPE #: 001 FLOW: M/R

SCG730197  
MINOR INDUSTRIAL  
EFFLUENT

MUSH SWAMP  
GLASSCOCK TRUCKING/G&K  
PIPE #: 001 FLOW: M/R  
PIPE #: 002 FLOW: M/R

SC0040088  
MINOR INDUSTRIAL  
WQL FOR BOD  
EFFLUENT

LONG BRANCH  
USAF/SHAW AIR FORCE BASE  
PIPE #: 002 FLOW: M/R  
PIPE #: 008 FLOW: M/R

SC0024970  
MINOR INDUSTRIAL  
EFFLUENT  
EFFLUENT

NASTY BRANCH  
PHIBRO-TECH INC.  
PIPE #: 001 FLOW: M/R

SC0034860  
MINOR INDUSTRIAL  
EFFLUENT

NASTY BRANCH  
YUASA-EXIDE INC.  
PIPE #: 001 FLOW: M/R

SCG250010  
MINOR INDUSTRIAL  
EFFLUENT

NASTY BRANCH TRIBUTARY  
GOLD KIST/POULTRY PROCESSING  
PIPE #: 001 FLOW: M/R

SCG250155  
MINOR INDUSTRIAL  
EFFLUENT

POCALLA CREEK  
GOLD KIST/POULTRY PROCESSING  
PIPE #: 001 FLOW: 1.50  
PIPE #: 001 FLOW: 0.466 (PROPOSED)  
WQL FOR DO,TRC,NH3N,BOD5

SC0000795  
MAJOR INDUSTRIAL  
WATER QUALITY  
WATER QUALITY

POCALLA CREEK  
CRESCENT TOOLS/COOPER IND.  
PIPE #: 001 FLOW: 0.400

SCG250157  
MINOR INDUSTRIAL  
EFFLUENT

POCALLA CREEK  
KAYDON CORPORATION  
PIPE #: 001 FLOW: M/R

SCG250132  
MINOR INDUSTRIAL  
EFFLUENT

SPANN BRANCH  
BRIARCLIFF MHP  
PIPE #: 001 FLOW: 0.026  
WQL FOR DO,TRC,NH3N,BOD5

SC0031844  
MINOR DOMESTIC  
WATER QUALITY

TURKEY CREEK  
KORN INDUSTRIES/PLT 2  
PIPE #: 001 FLOW: M/R

SCG250096  
MINOR INDUSTRIAL  
EFFLUENT

TURKEY CREEK  
VAUGHAN-BASSETT FURNITURE CO.  
PIPE #: 001 FLOW: M/R

SCG250018  
MINOR INDUSTRIAL  
EFFLUENT

TURKEY CREEK  
SOUTHEASTERN CHEM & SOLVENT CO.  
PIPE #: 001 FLOW: M/R

SCG250058  
MINOR INDUSTRIAL  
EFFLUENT

## Nonpoint Source Management Program

### *Camping Facilities*

**FACILITY NAME/TYPE**  
**RECEIVING STREAM**

**PERMIT #**  
**STATUS**

SHAROLYN FAMILY CAMPGROUND/FAMILY  
FRIERSON POND TO MUSH SWAMP

43-5203  
ACTIVE

### *Land Disposal Activities*

#### **Landfill Facilities**

**LANDFILL NAME**  
**FACILITY TYPE**

**PERMIT #**  
**STATUS**

CAROLINA GOLDEN PRODUCTS  
INDUSTRIAL

IWP-013  
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PHIBRO TECH INC. INDUSTRIAL	----- -----
WEDGEWOOD DUMP -----	----- CLOSED
BURGESS BROGDEN C&D DUMP CONSTRUCTION	----- -----

### Land Application Sites

**LAND APPLICATION SYSTEM  
FACILITY NAME**

**ND#  
TYPE**

SPRAYFIELD USAF/SHAW AFB	ND0070173 INDUSTRIAL
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### Mining Activities

**MINING COMPANY  
MINE NAME**

**PERMIT #  
MINERAL**

GLASSCOCK TRUCKING CO., INC. SMG, INC. PIT	0646-85 SAND
JOE SINGLETON CO. SINGLETON MINE #4	1008-85 SAND/CLAY
LEE CONSTRUCTION CO. LEE CONSTRUCTION MINE #1	0878-85 SAND/CLAY
BOYKIN LAND SCRAPING CO. SAND PIT	0651-85 SAND/CLAY
APAC-CAROLINA, INC. ASPHALT PLANT #3	0087-85 SAND
BROWN & MARTIN COMPANY BROWN & MARTIN MINE	0418-85 SAND/CLAY

### Growth Potential

There is a high potential for residential, commercial, and industrial growth in this watershed, which contains the majority of the City of Sumter and Shaw Air Force Base. Several major U.S. highways intersect in Sumter and increase the urban sprawl in every direction outside of the city. There are also several industrial parks and three rail lines.